STIC Search Report
EIC 2100

STIC Database Tracking Number: 108423

TO: Aaron Strange **Location: 3C16** **Art Unit : 2153** **Monday, November 24, 2003** **Case Serial Number: 09/718143**	**From: David Holloway** **Location: EIC 2100** **PK2-4B30** **Phone: 308-7794** **david.holloway@uspto.gov**

Search Notes

Dear Examiner Strange,

Attached please find your search results for above-referenced case.
Please contact me if you have any questions or would like a re-focused search.

David

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Set     Items   Description
S1         13   AU=(SHABTAY, L? OR SHABTAY L?)
S2          4   S1 AND IC=G06F?
S3          4   IDPAT (sorted in duplicate/non-duplicate order)
S4          2   IDPAT (primary/non-duplicate records only)
File 344:Chinese Patents Abs Aug 1985-2003/Apr
         (c) 2003 European Patent Office
File 347:JAPIO Oct 1976-2003/Jul(Updated 031105)
         (c) 2003 JPO & JAPIO
File 348:EUROPEAN PATENTS 1978-2003/Nov W02
         (c) 2003 European Patent Office
File 349:PCT FULLTEXT 1979-2002/UB=20031113,UT=20031106
         (c) 2003 WIPO/Univentio
File 350:Derwent WPIX 1963-2003/UD,UM &UP=200374
         (c) 2003  Thomson Derwent
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4/5/1 (Item 1 from file: 350)

DIALOG(R)File 350:Derwent WPIX
(c) 2003 Thomson Derwent. All rts. reserv.

014838840 **Image available**
WPI Acc No: 2002-659546/200271
XRPX Acc No: N02-521234

Connecting client to server by load balancer associated with several servers in way that does not require management of large storage area

Patent Assignee: AVAYA COMMUNICATIONS ISRAEL LTD (AVAY-N); AVAYA COMMUNICATION LTD (AVAY-N); AVAYA COMMUNICATION ISRAEL LTD (AVAY-N); AMITAI E (AMIT-I); BEISER D (BEIS-I); FRIEDMAN O (FRIE-I); KRONENTAL G (KRON-I); SHABTAY L (SHAB-I)

Inventor: AMITAI E; BEISER D; FRIEDMAN O; KRONENTAL G; **SHABTAY L**

Number of Countries: 032 Number of Patents: 007

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
EP 1235411	A2	20020828	EP 2002251339	A	20020226	200271 B
BR 200200490	A	20021001	BR 2002490	A	20020220	200271
US 20020120743	A1	20020829	US 2001793455	A	20010226	200271
CA 2367942	A1	20020826	CA 2367942	A	20020116	200272
CN 1372405	A	20021002	CN 2002105114	A	20020222	200307
JP 2002335268	A	20021122	JP 200248878	A	20020226	200307
KR 2002069489	A	20020904	KR 20029821	A	20020225	200309

Priority Applications (No Type Date): US 2001793455 A 20010226

Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
EP 1235411	A2	E	13	H04L-029/06	
	Designated States (Regional): AL AT BE CH CY DE DK ES FI FR GB GR IE IT LI LT LU LV MC MK NL PT RO SE SI TR				
BR 200200490	A			H04L-012/56	
US 20020120743	A1			G06F-015/173	
CA 2367942	A1	E		H04L-012/12	
CN 1372405	A			H04L-012/54	
JP 2002335268	A		13	H04L-012/56	
KR 2002069489	A			H04L-012/56	

Abstract (Basic): EP 1235411 A2

NOVELTY - Involves establishing a first connection for transmission of packets between the load balancer and the client. A server is selected to service the client. The first connection is spliced with a second connection between the load balancer and the selected server. The second connection is established before the first connection.

USE - To connect a client to a server by a load balancer associated with several servers e.g. in packet based network using HTTP messages.

ADVANTAGE - Does not require the management of a large storage area for all first packets of connections for which the load balancer is currently selecting a server.

DESCRIPTION OF DRAWING(S) - The drawing shows a flow diagram of the method.

pp; 13 DwgNo 2/2

Title Terms: CONNECT; CLIENT; SERVE; LOAD; BALANCE; ASSOCIATE; SERVE; WAY; REQUIRE; MANAGEMENT; STORAGE; AREA

Derwent Class: T01; W01

International Patent Class (Main): **G06F-015/173** ; H04L-012/12; H04L-012/54 ; H04L-012/56; H04L-029/06

International Patent Class (Additional): **G06F-013/00** ; **G06F-015/00** ; H04B-007/24

File Segment: EPI

4/5/2 (Item 2 from file: 350)

DIALOG(R)File 350:Derwent WPIX
(c) 2003 Thomson Derwent. All rts. reserv.

014652463 **Image available**
WPI Acc No: 2002-473167/200251
XRPX Acc No: N02-373551

Load balancer operation acceleration method in communication network, involves comparing parameters of packets with respective fields of entries of list of packet groups, to determine if the packets match entry of list

Patent Assignee: AVAYA COMMUNICATION ISRAEL LTD (AVAY-N)
Inventor: **SHABTAY L**
Number of Countries: 031 Number of Patents: 006
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week	
EP 1209876	A2	20020529	EP 2001309790	A	20011121	200251	B
BR 200105234	A	20020625	BR 20015234	A	20011114	200251	
CA 2359855	A1	20020521	CA 2359855	A	20011024	200251	
CN 1354578	A	20020619	CN 2001130371	A	20011121	200263	
JP 2002232446	A	20020816	JP 2001355429	A	20011121	200269	
KR 2002039615	A	20020527	KR 200172186	A	20011120	200275	

Priority Applications (No Type Date): US 2000718143 A 20001121
Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
EP 1209876	A2	E	21	H04L-029/06	
Designated States (Regional): AL AT BE CH CY DE DK ES FI FR GB GR IE IT LI LT LU LV MC MK NL PT RO SE SI TR					
BR 200105234	A			H04L-029/06	
CA 2359855	A1	E		H04L-012/56	
CN 1354578	A			H04L-012/56	
JP 2002232446	A		19	H04L-012/44	
KR 2002039615	A			H04L-012/56	

Abstract (Basic): EP 1209876 A2

NOVELTY - Parameters of packets received by an accelerator switch (26) are compared with respective fields of entries of a list of packet groups, to determine whether the packets match with an entry of the list. The packets are directly forwarded to the destination, based on the determination result.

DETAILED DESCRIPTION - INDEPENDENT CLAIMS are included for the following:

(1) Method of creating entry in a list which correlates between packet groups and respective destination servers; and

(2) Load balancing accelerator.

USE - For accelerating server load balancing operation in communication networks, by an accelerator switch.

ADVANTAGE - By using smaller sets of parameters in grouping the packets, the operation of the accelerator is simplified and the amount of storage space required, is reduced.

DESCRIPTION OF DRAWING(S) - The figure shows the schematic block diagram of the server farm.

Accelerator switch (26)

pp; 21 DwgNo 1/8

Title Terms: LOAD; BALANCE; OPERATE; ACCELERATE; METHOD; COMMUNICATE; NETWORK; COMPARE; PARAMETER; PACKET; RESPECTIVE; FIELD; ENTER; LIST; PACKET; GROUP; DETERMINE; PACKET; MATCH; ENTER; LIST
Derwent Class: T01; W01
International Patent Class (Main): H04L-012/44; H04L-012/56; H04L-029/06
International Patent Class (Additional): **G06F-013/00** ; **G06F-015/177** ; H04L-012/02; H04L-012/46; H04L-029/02; H04L-029/12
File Segment: EPI

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Set     Items   Description
S1          8   AU=(SHABTAY, L? OR SHABTAY L?)
S2          5   RD (unique items)
File   2:INSPEC 1969-2003/Nov W2
         (c) 2003 Institution of Electrical Engineers
File   8:Ei Compendex(R) 1970-2003/Nov W2
         (c) 2003 Elsevier Eng.  Info. Inc.
File  35:Dissertation Abs Online 1861-2003/Oct
         (c) 2003 ProQuest Info&Learning
File  65:Inside Conferences 1993-2003/Nov W3
         (c) 2003 BLDSC all rts. reserv.
File 434:SciSearch(R) Cited Ref Sci 1974-1989/Dec
         (c) 1998 Inst for Sci Info
File 636:Gale Group Newsletter DB(TM) 1987-2003/Nov 20
         (c) 2003 The Gale Group
File 275:Gale Group Computer DB(TM) 1983-2003/Nov 20
         (c) 2003 The Gale Group
File 160:Gale Group PROMT(R) 1972-1989
         (c) 1999 The Gale Group
File 148:Gale Group Trade & Industry DB 1976-2003/Nov 21
         (c)2003 The Gale Group
File  20:Dialog Global Reporter 1997-2003/Nov 21
         (c) 2003 The Dialog Corp.
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2/5/1 (Item 1 from file: 2)
DIALOG(R)File 2:INSPEC

6323405 INSPEC Abstract Number: B1999-09-6150M-108, C1999-09-5640-069
Title: On the memory overhead of distributed snapshots
Author(s): **Shabtay, L.** ; Segall, A.
Author Affiliation: Dept. of Comput. Sci., Technion-Israel Inst. of Technol., Haifa, Israel
Journal: Networks vol.34, no.1 p.11-17
Publisher: Wiley,
Publication Date: Aug. 1999 Country of Publication: USA
CODEN: NTWKAA ISSN: 0028-3045
SICI: 0028-3045(199908)34:1L.11:MODS;1-L
Material Identity Number: N073-1999-005
U.S. Copyright Clearance Center Code: 0028-3045/99/010011-07
Language: English Document Type: Journal Paper (JP)
Treatment: Theoretical (T)
Abstract: This paper shows that the memory overhead of distributed snapshots is unbounded. Several techniques are suggested for bounding it: bounded memory-overhead versions of distributed snapshots for specific problems, like termination detection and deadlock detection; use of alternative protocols; or use of synchronizers or schedulers in order to limit the photographed protocol to executions whose distributed snapshot requires bounded memory. Each solution is discussed in detail, and its memory overhead is analyzed. (24 Refs)
Subfile: B C
Descriptors: buffer storage; computational complexity; distributed processing; protocols; synchronisation
Identifiers: unbounded memory overhead; distributed snapshots; bounded memory-overhead; termination detection; deadlock detection; protocols; synchronizers; schedulers; photographed protocol; undirected graph; superimposed protocols; memory complexity; buffers
Class Codes: B6150M (Protocols); C5640 (Protocols)

2/5/2 (Item 2 from file: 2)
DIALOG(R)File 2:INSPEC

4933287 INSPEC Abstract Number: B9506-6150-013, C9506-4240P-018
Title: Low complexity network synchronization
Author(s): **Shabtay, L.** ; Segall, A.
Author Affiliation: Dept. of Comput. Sci., Technion-Israel Inst. of Technol., Haifa, Israel
p.223-37
Editor(s): Tel, G.; Vitanyi, P.
Publisher: Springer-Verlag, Berlin, Germany
Publication Date: 1994 Country of Publication: West Germany x+369 pp.
ISBN: 3 540 58449 8
Conference Title: 8th International Workshop on Distributed Algorithms
Conference Sponsor: Nat. Faciliteit Inf
Conference Date: 29 Sept.-1 Oct. 1994 Conference Location: Terschelling, Netherlands
Language: English Document Type: Conference Paper (PA)
Treatment: Practical (P)
Abstract: Synchronizer gamma is the best synchronizer known that works with any type of synchronous model and any network topology. This paper presents three new synchronizers: eta /sub 1/, eta /sub 2/ and theta . These synchronizers use sparse covers in order to operate and have the following advantages over synchronizer gamma : (1) They are conceptually simpler, as only one convergecast and one broadcast processes are performed along each cluster spanning-tree between each two consecutive pulses, and no preferred links are needed for inter-cluster communication. (2) Synchronizer eta /sub 2/ uses half the communication complexity of synchronizer gamma , while retaining the time complexity. (3) Synchronizer theta uses half the time complexity of synchronizer gamma , while retaining

the communication complexi[redacted] (4) Since there is no need to [redacted]ect preferred links between neighboring clusters, the initialization process of these synchronizers is more efficient: it requires only O(mod V mod log mod V mod + mod E mod) messages. (19 Refs)
Subfile: B C
Descriptors: communication complexity; computational complexity; distributed algorithms
Identifiers: low complexity network synchronization; synchronous model; network topology; sparse covers; cluster spanning-tree; time complexity; communication complexity; initialization process
Class Codes: B6150 (Communication system theory); C4240P (Parallel programming and algorithm theory); C4240C (Computational complexity); C6150N (Distributed systems software)

2/5/3 (Item 3 from file: 2)
DIALOG(R)File 2:INSPEC

4731617 INSPEC Abstract Number: C9409-6150N-066
Title: A synchronizer with low memory overhead
Author(s): **Shabtay, L.** ; Segall, A.
Author Affiliation: Dept. of Comput. Sci., Technion-Israel Inst. of Technol., Haifa, Israel
p.250-7
Publisher: IEEE Comput. Soc. Press, Los Alamitos, CA, USA
Publication Date: 1994 Country of Publication: USA xix+651 pp.
ISBN: 0 8186 5840 1
U.S. Copyright Clearance Center Code: 1063-6927/94/03.00
Conference Title: 14th International Conference on Distributed Computing Systems
Conference Sponsor: IEEE Comput. Soc. Tech. Committee on Distributed Process.; Polish Inf. Process. Soc
Conference Date: 21-24 June 1994 Conference Location: Pozman, Poland
Language: English Document Type: Conference Paper (PA)
Treatment: Practical (P); Theoretical (T)
Abstract: A new message-delaying version of synchronizer gamma , named zeta , is presented. Synchronizer zeta ensures that original-protocol messages received by a node from nodes in the same cluster are never early, and thus, no buffers for their temporary storage are necessary. Only original-protocol messages on edges leading to nodes of other clusters (external edges) may be early. The z-partition algorithm is introduced to reduce the number of external edges connected to each node, thus reducing the memory overhead of zeta . For an arbitrary z, this algorithm ensures that the external degree of each node is no more than (mod V mod /z)-1. The z-partition algorithm increases the time complexity of zeta to O(z+log/sub k/ mod V mod) per pulse. The tradeoff between memory overhead and time complexity achieved by the z-partition algorithm is optimal. (22 Refs)
Subfile: C
Descriptors: communication complexity; computational complexity; message passing; protocols; storage management; synchronisation
Identifiers: low memory overhead; synchronizer; message-delaying; original-protocol messages; z-partition algorithm; external edges; memory overhead; time complexity; distributed protocol; communication complexity
Class Codes: C6150N (Distributed systems); C5640 (Protocols); C4240P (Parallel programming and algorithm theory)

2/5/4 (Item 4 from file: 2)
DIALOG(R)File 2:INSPEC

04145078 INSPEC Abstract Number: C9206-4240P-056
Title: Message delaying synchronizers
Author(s): **Shabtay, L.** ; Segall, A.
Author Affiliation: Dept. of Comput. Sci., Technion Israel Inst. of

Technol., Haifa, Israel
Conference Title: Distributed Algorithms. 5th International Workshop, WDAG '91. Proceedings p.309-18
Editor(s): Toueg, S.; Spirakis, P.G.; Kirousis, L.
Publisher: Springer-Verlag, Berlin, Germany
Publication Date: 1992 Country of Publication: West Germany x+318 pp.
ISBN: 3 540 55236 7
Conference Date: 7-9 Oct. 1991 Conference Location: Delphi, Greece
Language: English Document Type: Conference Paper (PA)
Treatment: Theoretical (T)
Abstract: Delaying messages is one of the techniques that can be employed in order to create correct asynchronous protocols using the synchronizer mechanism. The paper shows that message delaying cannot be implemented with certain synchronizers and that the synchronizers must be altered before message delaying can be applied. It presents three different techniques that solve the problem and work for most synchronizers. (12 Refs)
Subfile: C
Descriptors: distributed processing; parallel algorithms; programming theory; protocols
Identifiers: asynchronous protocols; synchronizer mechanism; message delaying
Class Codes: C4240P (Parallel programming and algorithm theory); C6150N (Distributed systems)

2/5/5 (Item 1 from file: 8)
DIALOG(R)File 8:Ei Compendex(R)

04020473 E.I. No: EIP94122487215
Title: Synchronizer with low memory overhead, extended abstract
Author: **Shabtay, Lior** ; Segall, Adrian
Corporate Source: Technion IIT, Haifa, Isr
Conference Title: Proceedings of the 1994 IEEE 14th International Conference on Distributed Computing Systems
Conference Location: Poznan, Pol Conference Date: 19940621-19940624
Sponsor: IEEE; Technical Committee on Distributed Processing; Polish Information Processing Society
E.I. Conference No.: 21451
Source: Proceedings - International Conference on Distributed Computing Systems 1994. IEEE, Piscataway, NJ, USA,94CH3450-4. p 250-257
Publication Year: 1994
CODEN: PICSEJ
Language: English
Document Type: CA; (Conference Article) Treatment: T; (Theoretical)
Journal Announcement: 9502W3
Abstract: A new message-delaying version of synchronizer gamma , named zeta , is presented. Synchronizer zeta ensures that original-protocol messages received by a node from nodes in the same cluster are never early, and thus, no buffers for their temporary storage are necessary. Only original-protocol messages on edges leading to nodes of other clusters (external edges) may be early. The z-partition algorithm is introduced to reduce the number of external edges connected to each node, thus reducing the memory overhead of zeta . For an arbitrary z, this algorithm ensures that the external degree of each node is no more than left bracket V/2 right bracket minus 1. The z-partition algorithm increases the time complexity of zeta to O(z plus log//k vertical bar V vertical bar) per pulse. The tradeoff between memory overhead and time complexity achieved by the z-partition algorithm is optimal. (Author abstract) 22 Refs.
Descriptors: *Data communication systems; Network protocols; Data storage equipment; Algorithms; Computer networks; Optimal control systems; Mathematical models; Codes (symbols); Distributed computer systems
Identifiers: Synchronizer; Memory overhead; Communication complexity
Classification Codes:
722.3 (Data Communication, Equipment & Techniques); 722.1 (Data Storage, Equipment & Techniques); 723.5 (Computer Applications); 731.1 (Control Systems); 921.6 (Numerical Methods); 722.4 (Digital Computers & Systems)

722 (Computer Hardware); 723 (Computer Software); 731 (Automatic Control Principles); 921 (Applied Mathematics)
72 (COMPUTERS & DATA PROCESSING); 73 (CONTROL ENGINEERING); 92 (ENGINEERING MATHEMATICS)

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Set     Items   Description
S1    1080614   BALANC? OR DISTRIBUT? OR ALLOCAT? OR REALLOCAT? OR SHAR? OR
             REDISTRIBUT?
S2     623157   TABLE? OR MATRIX? OR MATRICES OR TUPLE OR GRID? OR SUBTABL-
             E?
S3    2083295   PACKET? OR FLOW? ? OR BANDWIDTH? OR LOAD?
S4    2706440   COMPAR? OR MATCH? OR LOCAT? OR IDENTIF? OR SORT? OR FILTER?
S5    3151029   ADDRESS? OR SOURCE? OR DESTINATION? OR ID OR COOKIE? OR PO-
             RT? OR PARAMETER?
S6       1130   SERVER()FARM? OR (MULTIPL? OR PLURAL? OR SEVERAL? OR MANY -
             OR VARIOUS?)(N)(SERVER? OR ROUTER?)
S7      21886   PERSISTEN? OR STICKY OR STICKINESS
S8       7407   S1 AND S2 AND S3
S9       1268   S1 AND S7
S10        25   S8 AND S9
S11        22   S1 AND S2 AND (S4 OR S5) AND S6
S12        47   S10 OR S11
S13        20   S12 AND IC=G06F?
S14      1946   S1 AND S2 AND S3 AND S4
S15       642   S14 AND S5
S16         8   S15 AND S7
S17        47   S12 OR S16
S18        20   S17 AND IC=G06F?
S19        20   IDPAT (sorted in duplicate/non-duplicate order)
S20        20   IDPAT (primary/non-duplicate records only)
File 347:JAPIO Oct 1976-2003/Jul(Updated 031105)
         (c) 2003 JPO & JAPIO
File 350:Derwent WPIX 1963-2003/UD,UM &UP=200374
         (c) 2003  Thomson Derwent
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20/5/2 (Item 2 from file: 350)
DIALOG(R)File 350:Derwent WPIX

015418356 **Image available**
WPI Acc No: 2003-480496/200345
XRPX Acc No: N03-382016
Cache load balancing **method in multiprocessor web server, involves mapping each transaction types to** several servers **using performance statistics to form dispatch** table
Patent Assignee: HSIEH H (HSIE-I); HUANG C (HUAN-I); SINGH R (SING-I)
Inventor: HSIEH H; HUANG C; SINGH R
Number of Countries: 001 Number of Patents: 001
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week	
US 20030065702	A1	20030403	US 2001962964	A	20010924	200345	B

Priority Applications (No Type Date): US 2001962964 A 20010924
Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
US 20030065702	A1		12	G06F-009/00	

Abstract (Basic): US 20030065702 A1
NOVELTY - Several transaction types are **identified** for processing by a load **balancing** system having **multiple servers** . A performance statistics is determined for each of the transaction types that is mapped to **several servers** using performance statistics to form a dispatch **table** . The incoming transactions are dispatched to the servers using dispatch **table** .
DETAILED DESCRIPTION - INDEPENDENT CLAIMS are also included for the following:
(1) load **balancing** system; and
(2) computer readable medium storing instructions for cache load **balance** .
USE - For **balancing** load of cache for processing transaction such as buy, sell, account, update, quote, **portfolio** , register, in multiprocessor web server.
ADVANTAGE - Enables to dispatch incoming transactions to **various servers** and hence effective usage of processor cache is attained. Enables to reduce regency time for processing the transaction.
DESCRIPTION OF DRAWING(S) - The figure shows a flow diagram illustrating the cache load **balancing** process.
pp; 12 DwgNo 4/6
Title Terms: CACHE; LOAD; **BALANCE** ; METHOD; MULTIPROCESSOR; WEB; SERVE; MAP; TRANSACTION; TYPE; SERVE; PERFORMANCE; STATISTICAL; FORM; DISPATCH; **TABLE**
Derwent Class: T01
International Patent Class (Main): **G06F-009/00**
File Segment: EPI

20/5/4 (Item 4 from file: 350)
DIALOG(R)File 350:Derwent WPIX

014714166 **Image available**
WPI Acc No: 2002-534870/200257
Method for supplying mail service using plural mail servers , plural **common databases, and user allotment** table
Patent Assignee: LETTEE.COM (LETT-N)
Inventor: KIM G I
Number of Countries: 001 Number of Patents: 001
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week	
KR 2002011729	A	20020209	KR 200045216	A	20000804	200257	B

Priority Applications (No Type Date): KR 200045216 A 20000804
Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
KR 2002011729	A		1	G06F-017/60	

Abstract (Basic): KR 2002011729 A
NOVELTY - A method for supplying a mail service using plural mail **servers** , **plural** common databases, and a user allotment **table** is provided to transmit/receive mails to a plurality of users.
DETAILED DESCRIPTION - When new user joins as a member, a predetermined mail server is **allocated** out of a plurality of mail servers according to users. And a predetermined **portion** is **allocated** out of a common database according to each mail server using a user allotment **table** (S810). At this time, a plurality of sub web servers may be provided by considering a load of a web server, and a predetermined sub web server may be **allocated** according to users. If a mail is transmitted to a transmission mail server of a transmitter(S820), the user allotment **table** stores the mail to the **allocated portion** of the common database, and transmits the information to the **allocated** mail server(S830). The user performs a log-in process(S840). The user allotment **table** makes the user be connected to the **allocated** mail server, and detects the **allocated** common database **portion** (S850). If the user requests a confirmation of the received mail, the **allocated** mail server fetches a mail stored in the **allocated** common database **portion** (S860).
pp; 1 DwgNo 1/10
Title Terms: METHOD; SUPPLY; MAIL; SERVICE; PLURAL; MAIL; SERVE; PLURAL; COMMON; USER; ALLOT; **TABLE**
Derwent Class: T01
International Patent Class (Main): **G06F-017/60**
File Segment: EPI

20/5/6 (Item 6 from file: 350)
DIALOG(R)File 350:Derwent WPIX

014595499 **Image available**
WPI Acc No: 2002-416203/200244
XRPX Acc No: N02-327505

Traffic routing method on Internet protocol communication network, involves generating traffic matrix **for optimizing routes between routers and accordingly** distributing **route** table **from centralized system to routers**

Patent Assignee: AVIDAN Y (AVID-I); TANAY A (TANA-I); TANAY J (TANA-I)
Inventor: AVIDAN Y; TANAY A; TANAY J

Number of Countries: 097 Number of Patents: 003
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week	
WO 200223807	A2	20020321	WO 2001IL860	A	20010911	200244	B
AU 200188036	A	20020326	AU 200188036	A	20010911	200251	
US 20020174246	A1	20021121	US 2000232505	A	20000913	200279	
			US 2001768521	A	20010124		

Priority Applications (No Type Date): US 2001768521 A 20010124; US 2000232505 P 20000913
Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
WO 200223807	A2	E	25	H04L-012/00	

Designated States (National): AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ DE DK DM DZ EC EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PH PL PT RO RU SE SG SI SK SL TJ TM TR TT TZ UA UG US UZ VN YU ZA ZW
Designated States (Regional): AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW MZ NL OA PT SD SE SL SZ TR TZ UG ZW

AU 200188036	A	H04L-012/00	Based on patent WO 200223807	
US 20020174246	A1	G06F-015/173	Provisional application US 2000232505	

Abstract (Basic): WO 200223807 A2

NOVELTY - The network traffic statistics including ingress and egress statistics obtained based on a traffic load **distribution** of each router, are gathered from an IP network (110). A central system build a traffic **matrix** (126), based on the analysis and the classification of the traffic statistics. Based on the traffic **matrix** , the routes between the routers are optimized and accordingly a routing **table** (130) is **distributed** from the system to **several routers** .

DETAILED DESCRIPTION - INDEPENDENT CLAIMS are also included for the following:

(a) Traffic router;

(b) Virtual signaling Internet protocol **identifier**

USE - For routing traffic on Internet protocol communication network.

ADVANTAGE - The centralized system computes the routing **tables** for routers in the IP protocol network and **distributes** the **table** to the individual routers, thereby the quality performance of the network is improved.

DESCRIPTION OF DRAWING(S) - The figure shows the block diagram of the traffic routing system.

IP network (110)

Traffic **matrix** (126)

Routing **table** (130)

pp; 25 DwgNo 1/5

Title Terms: TRAFFIC; ROUTE; METHOD; PROTOCOL; COMMUNICATE; NETWORK; GENERATE; TRAFFIC; **MATRIX** ; OPTIMUM; ROUTE; ROUTER; ACCORD; **DISTRIBUTE** ; ROUTE; **TABLE** ; CENTRE; SYSTEM; ROUTER
Derwent Class: T01; W01
International Patent Class (Main): **G06F-015/173** ; H04L-012/00
File Segment: EPI

20/5/9 (Item 9 from file: 350)
DIALOG(R)File 350:Derwent WPIX

013990566 **Image available**
WPI Acc No: 2001-474781/200151
XRPX Acc No: N01-351377

Client side dispatcher for migrating connection for high-level client application from original server address **to relocated server** address **has session** table **for storing original and relocated server** addresses

Patent Assignee: RESONATE INC (RESO-N)
Inventor: BRENDEL J
Number of Countries: 001 Number of Patents: 001
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week	
US 6182139	B1	20010130	US 96691006	A	19960805	200151	B
			US 98103336	A	19980623		

Priority Applications (No Type Date): US 98103336 A 19980623; US 96691006 A 19960805
Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
US 6182139	B1		21	G06F-013/38	CIP of application US 96691006 CIP of patent US 5774660

Abstract (Basic): US 6182139 B1

NOVELTY - A session **table** for storing an original and relocated server **addresses** ; input receives from the high-level client application (14) first packets containing original server **address** ; outputting to network (30) second packets containing relocated server **address** ; first packets are stored in a local packet storage; first and second state machine; a checksum generator; and a sequence number generator.

DETAILED DESCRIPTION - A first state machine tracks a sequence of the first packets from the high-level client and a second state machine tracks a sequence of the second packets to the network. The session **table** has a number of entires. The sequence numbers of the incoming packets from the relocated server are adjusted by subtracting a delta value while the acknowledgement sequence numbers for outgoing packets to the relocated server are adjusted by adding the delta value. The delta value is generated by subtracting a sequence number from a first packet received from the relocated server from a sequence number from a first packet received from the original server. The client side dispatcher includes a first and second TCP state connection.

USE - For Internet request dispatching from clients to servers.

ADVANTAGE - Provides highly-fault tolerant web-browser. Error recovery using client side TCP migration greatly reduces the probability that a user gets the 'SERVER NOT RESPONDING' error message when a server fails at the web site. If the primary load **balancer** at the **server farm** crashes or otherwise becomes unavailable, the client with the client side dispatcher does not hang since client packets are not forwarded through the load **balancer** . Avoids a client hang caused by a load- **balancer** crash.

DESCRIPTION OF DRAWING(S) - The figure shows client side dispatcher in the client machine that assigns a server to the client.

Client (10)
High-level user applications (14)
Client side dispatcher (20)
Network (30)
pp; 21 DwgNo 3/10

Title Terms: CLIENT; SIDE; DISPATCH; MIGRATION; CONNECT; HIGH; LEVEL; CLIENT; APPLY; ORIGINAL; SERVE; **ADDRESS** ; RELOCATION; SERVE; **ADDRESS** ; SESSION; **TABLE** ; STORAGE; ORIGINAL; RELOCATION; SERVE; **ADDRESS**
Derwent Class: T01; W01
International Patent Class (Main): **G06F-013/38**
International Patent Class (Additional): **G06F-015/17**
File Segment: EPI

20/5/16 (Item 16 from file: 347)
DIALOG(R)File 347:JAPIO

07055102 **Image available**
JOB LOAD DISPERSION SYSTEM

PUB. NO.: 2001-282737 [JP 2001282737 A]
PUBLISHED: October 12, 2001 (20011012)
INVENTOR(s): ODAGIRI KOJI
APPLICANT(s): MITSUBISHI ELECTRIC CORP
APPL. NO.: 2000-089760 [JP 200089760]
FILED: March 28, 2000 (20000328)
INTL CLASS: **G06F-015/00** ; **G06F-015/16** ; **G06F-015/177**

ABSTRACT

PROBLEM TO BE SOLVED: To simply and easily disperse load in a system needing user authentication in the case of utilizing any one of **plural servers** .

SOLUTION: At the time of user log-in, by referring to a **table** 8 for job **distribution** management on the basis of the **identification** information, which is acquired from a **table** 7 for user management, of a group, to which a relevant user belongs, a job menu generating processing part 5 acquires a job application to be applied to the relevant user and a server 3 to execute that job application. Then, the job application is executed on that server 3, a job menu for the relevant user is generated by forming a hyper link and sent to a client 1 to be utilized by the relevant user, and the menu is displayed. When a job to be executed is selected out of the menu by the user, the relevant job application is executed on the assigned server 3.

05667487 **Image available**
COMMUNICATION PROCESSING SYSTEM

PUB. NO.: 09-282287 [JP 9282287 A]
PUBLISHED: October 31, 1997 (19971031)
INVENTOR(s): ANEZAKI AKIHIRO
MUKAI SHOICHI
APPLICANT(s): SHIKOKU NIPPON DENKI SOFTWARE KK [000000] (A Japanese Company or Corporation), JP (Japan)
NEC CORP [000423] (A Japanese Company or Corporation), JP (Japan)
APPL. NO.: 08-096643 [JP 9696643]
FILED: April 18, 1996 (19960418)
INTL CLASS: [6] **G06F-015/16**
JAPIO CLASS: 45.4 (INFORMATION PROCESSING -- Computer Applications)

ABSTRACT

PROBLEM TO BE SOLVED: To effectively **distribute** transactions received from plural terminals to respective servers corresponding to the throughput or load states of the respective servers by detecting the fluctuation of throughput or load states of the respective servers and dynamically changing the **distribution** ratio of transactions to the respective servers.

SOLUTION: The transactions from plural terminals 30 are received by a transaction **distributing** means 203 of the communication processor 20, and the processing is **distributed** to **plural servers** 10 to be parallelly operated. Concerning this **distribution** , the throughput is inquired of the respective servers 10 by a **distribution** ratio calculating means 201, these respective servers 10 report numerical values expressing the throughput from the throughput or load states of their own CPU to the **distribution** ratio calculating means 201, and that **distribution** ratio calculating means 201 dynamically changes the **distribution** ratio so that the number of entries on an index **table** 212 and a **distribution destination** register **table** 213 is equal to the total of transaction **distribution** ratio. Thus, the loads of transactions can be suitably **distributed** to the respective servers 10.

05667487 **Image available**
COMMUNICATION PROCESSING SYSTEM

PUB. NO.: 09-282287 [JP 9282287 A]
PUBLISHED: October 31, 1997 (19971031)
INVENTOR(s): ANEZAKI AKIHIRO
MUKAI SHOICHI
APPLICANT(s): SHIKOKU NIPPON DENKI SOFTWARE KK [000000] (A Japanese Company or Corporation), JP (Japan)
NEC CORP [000423] (A Japanese Company or Corporation), JP (Japan)
APPL. NO.: 08-096643 [JP 9696643]
FILED: April 18, 1996 (19960418)
INTL CLASS: [6] **G06F-015/16**
JAPIO CLASS: 45.4 (INFORMATION PROCESSING -- Computer Applications)

ABSTRACT

PROBLEM TO BE SOLVED: To effectively **distribute** transactions received from plural terminals to respective servers corresponding to the throughput or load states of the respective servers by detecting the fluctuation of throughput or load states of the respective servers and dynamically changing the **distribution** ratio of transactions to the respective servers.

SOLUTION: The transactions from plural terminals 30 are received by a transaction **distributing** means 203 of the communication processor 20, and the processing is **distributed** to **plural servers** 10 to be parallelly operated. Concerning this **distribution** , the throughput is inquired of the respective servers 10 by a **distribution** ratio calculating means 201, these respective servers 10 report numerical values expressing the throughput from the throughput or load states of their own CPU to the **distribution** ratio calculating means 201, and that **distribution** ratio calculating means 201 dynamically changes the **distribution** ratio so that the number of entries on an index **table** 212 and a **distribution destination** register **table** 213 is equal to the total of transaction **distribution** ratio. Thus, the loads of transactions can be suitably **distributed** to the respective servers 10.

```
Set     Items   Description
S1    4696635   BALANC? OR DISTRIBUT? OR ALLOCAT? OR REALLOCAT? OR SHAR? OR
               REDISTRIBUT?
S2    1794701   TABLE? OR MATRIX? OR MATRICES OR TUPLE OR GRID? OR SUBTABL?
S3    3741473   THROUGHPUT? OR PACKET? OR FLOW? ? OR BANDWIDTH? OR LOAD?
S4    9611202   COMPAR? OR MATCH? OR LOCAT? OR IDENTIF? OR SORT? OR FILTER?
S5    7903872   ADDRESS? OR SOURCE? OR DESTINATION? OR ID OR COOKIE? OR PO-
               RT? OR PARAMETER? OR CHARACTERISTIC?
S6       2807   SERVER()FARM? OR (MULTIPL? OR PLURAL? OR GROUP OR SEVERAL?
               OR MANY OR VARIOUS?)(N)(SERVER? OR ROUTER?)
S7     217579   PERSISTEN? OR STICKY OR STICKINESS
S8      40075   S1 AND S2 AND S3
S9      24646   S1 AND  S7
S10       200   S8 AND S9
S11        59   S1 AND S2 AND (S4 OR S5) AND S6
S12     15065   S1 AND S2 AND S3 AND S4
S13      5776   S12 AND S5
S14        53   S13 AND (S6 OR S7)
S15         0   S6 AND S10
S16        20   S2(3N)S3 AND S10
S17         0   S11 AND S7
S18        21   S1 AND S2 AND S4 AND S5 AND S6
S19         0   S13 AND S6 AND S7
S20    392264   S4(5N)S5
S21        14   S20 AND S14
S22        50   S16 OR S18 OR S21
S23        35   RD (unique items)
S24        30   S23 NOT PY>2000
S25        30   S24 NOT PD>20001121
File   8:Ei Compendex(R) 1970-2003/Nov W3
         (c) 2003 Elsevier Eng.  Info. Inc.
File  35:Dissertation Abs Online 1861-2003/Oct
         (c) 2003 ProQuest Info&Learning
File  65:Inside Conferences 1993-2003/Nov W4
         (c) 2003 BLDSC all rts. reserv.
File   2:INSPEC 1969-2003/Nov W3
         (c) 2003 Institution of Electrical Engineers
File  94:JICST-EPlus 1985-2003/Nov W4
         (c)2003 Japan Science and Tech Corp(JST)
File 111:TGG Natl.Newspaper Index(SM) 1979-2003/Nov 19
         (c) 2003 The Gale Group
File 233:Internet & Personal Comp. Abs. 1981-2003/Jul
         (c) 2003, EBSCO Pub.
File 144:Pascal 1973-2003/Nov W3
         (c) 2003 INIST/CNRS
File  34:SciSearch(R) Cited Ref Sci 1990-2003/Nov W3
         (c) 2003 Inst for Sci Info
File  99:Wilson Appl. Sci & Tech Abs 1983-2003/Oct
         (c) 2003 The HW Wilson Co.
```

25/5/4 (Item 4 from file: 8)
DIALOG(R)File 8:Ei Compendex(R)

04557259 E.I. No: EIP96113419464
Title: Load control in scalable distributed **file structures**
Author: Breitbart, Yuri; Vingralek, Radek; Weikum, Gerhard
Corporate Source: Univ of Kentucky, Lexington, KY, USA
Source: Distributed and Parallel Databases v 4 n 4 Oct 1996. p 319-354
Publication Year: 1996
CODEN: DPADEH ISSN: 0926-8782
Language: English
Document Type: JA; (Journal Article) Treatment: G; (General Review); T; (Theoretical)
Journal Announcement: 9701W2
Abstract: **Distributed** file structures (DiFS), record structures, and disk resident files with key based exact or interval **match** access are presented. Files are organized into buckets that are spread among **multiple servers** . Client requests are serviced by mapping keys onto buckets and looking up the corresponding server in an **address table** . Achieving scalability is one major problem, in the sense that both file size and client throughput can be scaled up by linearly increasing the number of servers and dynamically **redistributing** the data. Simulation results demonstrate the scalability with controlled cost/performance and the importance of global load control. Impact of various tuning **parameters** on the effectiveness of the load was studied in detail. 18 Refs.
Descriptors: **Distributed** database systems; Data structures; Data transfer; Storage **allocation** (computer); Computer simulation; Control systems; Cost effectiveness; Performance; Data acquisition
Identifiers: **Distributed** file structures; Disk resident files
Classification Codes:
723.3 (Database Systems); 723.2 (Data Processing); 722.2 (Computer Peripheral Equipment); 723.5 (Computer Applications); 731.1 (Control Systems); 911.2 (Industrial Economics)
723 (Computer Software); 722 (Computer Hardware); 731 (Automatic Control Principles); 911 (Industrial Economics)
72 (COMPUTERS & DATA PROCESSING); 73 (CONTROL ENGINEERING); 91 (ENGINEERING MANAGEMENT)

25/5/18 (Item 3 from file: 2)
DIALOG(R)File 2:INSPEC

5883437 INSPEC Abstract Number: B9805-6150M-036, C9805-5640-029
Title: Towards a new IP over ATM routing paradigm
Author(s): Dumortier, P.
Author Affiliation: Alcatel, Belgium
Conference Title: ISS'97: World Telecommunications Congress. `Global Network Evolution: Convergence or Collision?'. Proceedings Part vol.2 p.189-95 vol.2
Publisher: Pinnacle Group, Toronto, Ont., Canada
Publication Date: 1997 Country of Publication: Canada 2 vol. (xxxiv+591+633) pp.
Material Identity Number: XX97-03299
Conference Title: Proceedings of ISS'97 International Switching Symposium
Conference Sponsor: Alcatel Canada; Bell Canada; BC Tel; Island Telphone Co.; Manitoba Telecom Serv.; et al
Conference Date: 21-26 Sept. 1997 Conference Location: Toronto, Ont., Canada
Availability: The Pinnacle Group, 2 Pardee Avenue, Suite 300, Toronto, Ont. M6K 3H5, Canada
Language: English Document Type: Conference Paper (PA)
Treatment: Practical (P)
Abstract: Internet routing is traditionally based on dynamic **distributed** routing protocols. This hop-by-hop routing scheme has worked well in the past, but environmental growth of the Internet is starting to create a problem. The flat structure of the Internet means that the size of the routing **tables** directly reflects this growth. Per **packet** **table** lookups have thus become a heavy burden for routers, leading to performance bottlenecks in the end-to-end forwarding process. A way to alleviate this problem is to forward **packets** directly at the data link layer (L2), eliminating costly network layer (L3) processing. This is particularly applicable in non-broadcast multiple access (NBMA) networks, where direct connectivity can be provided between any two NBMA nodes. The ability to forward network layer **packets** (L3) at the data link layer (L3) across network boundaries is commonly referred to as shortcut routing. In the context of IP over ATM, it means that IP datagrams can be transferred across IP subnet boundaries without being processed by an IP **router** . **Several** architectures are currently being engineered to realize this L2 forwarding in one form or another. These include the next hop resolution protocol (NHRP) and multiprotocol label switching (MPLS) work of the IETF and the PNNI augmented routing (PAR) and integrated PNNI (I-PNNI) work of the ATM Forum. These approaches are first listed and categorized. At the time of writing, some are still in an embryonic phase. Despite this, a number of critical issues are **identified** which have to be **addressed** in order to obtain an efficient L2/L3 routing architecture. (16 Refs)
Subfile: B C
Descriptors: asynchronous transfer mode; Internet; **packet** switching; protocols; telecommunication network routing
Identifiers: IP; performance bottlenecks; **packet** forwarding; data link layer; non-broadcast multiple access; shortcut routing; next hop resolution protocol; multiprotocol label switching; IETF; PNNI augmented routing; integrated PNNI; ATM Forum; L2/L3 routing
Class Codes: B6150M (Protocols); B6150C (Communication switching); B6210L (Computer communications); B6150P (Communication network design and planning); C5640 (Protocols); C5620W (Other computer networks)

```
Set     Items   Description
S1      21923   BALANC? OR DISTRIBUT? OR ALLOCAT? OR REALLOCAT? OR SHAR? OR
              REDISTRIBUT?
S2       4386   TABLE? OR MATRIX? OR MATRICES OR TUPLE OR GRID? OR SUBTABL?
S3       1037   S1(2N)(THROUGHPUT? OR PACKET? OR FLOW? ? OR BANDWIDTH? OR -
              LOAD?)
S4        115   S2(2N)(COMPAR? OR MATCH? OR LOCAT? OR IDENTIF? OR SORT? OR
              FILTER?)
S5        678   (COMPAR? OR MATCH? OR LOCAT? OR IDENTIF? OR SORT? OR FILTE-
              R?)(3N)(ADDRESS? OR SOURCE? OR DESTINATION? OR ID OR COOKIE? -
              OR PORT? OR PARAMETER? OR CHARACTERISTIC?)
S6        739   SERVER()FARM? OR (MULTIPL? OR PLURAL? OR GROUP OR SEVERAL?
              OR MANY OR VARIOUS?)(N)(SERVER? OR ROUTER?)
S7        494   PERSISTEN? OR STICKY OR STICKINESS
S8          1   S3 AND S4
S9          0   S3 AND S5 AND S6 AND S7
S10         8   S3 AND S5
S11         3   S3 AND S6 AND S7
S12        12   S8 OR S10 OR S11
S13        10   S12 NOT PY>2000
S14         9   S13 NOT PD>20001121
File 256:SoftBase:Reviews,Companies&Prods. 82-2003/Oct
         (c)2003 Info.Sources Inc
```

14/3,K/1
DIALOG(R)File 256:SoftBase:Reviews,Companies&Prods.
(c)2003 Info.Sources Inc. All rts. reserv.

01781053 DOCUMENT TYPE: Product

PRODUCT NAME: SonicMQ (781053)

Sonic Software Corp (701114)
14 Oak Park
Bedford, MA 01730 United States
TELEPHONE: (781) 999-7000

RECORD TYPE: Directory

CONTACT: Sales Department

REVISION DATE: 20030721

...JMS, XML, DOM2, NJDI, SAX, XA, and other standards. Features include asynchronous reply, support for **multiple servers** , support for push client technology, support for large messages, comprehensive authentication services, and connect-time **load balancing** of client/server and server/server connections. It ensures reliability through its guaranteed delivery, fault tolerance through **persistent** messaging, transactional support, dead message queue, and duplicate message detection. The product line includes SonicMQ...

DESCRIPTORS: Alerts; Client/server; E-Mail; Enterprise Application Integration; Fault Tolerance; Integration Software; Internetworking; **Load Balancing** ; Network Software

14/3,K/2
DIALOG(R)File 256:SoftBase:Reviews,Companies&Prods.
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01673765 DOCUMENT TYPE: Product

PRODUCT NAME: FloodGate-1 (673765)

Check Point Software Technologies Ltd (594644)
800 Bridge Pkwy
Redwood City, CA 94065 United States
TELEPHONE: (650) 628-2000

RECORD TYPE: Directory

CONTACT: Sales Department

REVISION DATE: 20030421

...addition, a graphical real-time traffic monitor is included. The product can be used to **identify** the **source** of congestion and centrally modify policies as needed.

DESCRIPTORS: Bandwidth Management; Firewalls; Internet Security; Internetworking; **Load Balancing** ; Network Administration; Network Software; Performance Monitors; QoS (Quality of Service); System Monitoring; System Performance; VPNs...

14/3,K/3
DIALOG(R)File 256:SoftBase:Reviews,Companies&Prods.
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01145262 DOCUMENT TYPE: Product

PRODUCT NAME: Avaki Compute Grid 2.6 (145262)

Avaki Corp (731579)
15 New England Executive Park
Burlington, MA 01803 United States
TELEPHONE: (781) 272-3331

RECORD TYPE: Directory

CONTACT: Sales Department

REVISION DATE: 20030403

...6, available as part of the Avaki Comprehensive Grid system, federates processing resources across multiple **locations** . Avaki Compute **Grid** 2.6 allows organizations to employ policies in providing users with access to resources. Local...

DESCRIPTORS: Computer Resource Management; Grid Computing; **Load Balancing** ; Network Administration; Network Software; Parallel Processing

14/3,K/4
DIALOG(R)File 256:SoftBase:Reviews,Companies&Prods.
(c)2003 Info.Sources Inc. All rts. reserv.

01138398 DOCUMENT TYPE: Product

PRODUCT NAME: Resonate Global Dispatch (138398)

Resonate Inc (627071)
385 Moffett Park Dr #205
Sunnyvale, CA 94089 United States
TELEPHONE: (408) 548-5500

RECORD TYPE: Directory

CONTACT: Sales Department

REVISION DATE: 20030310

...recovery features. Group-level personalization options direct users to specific servers and applications. Users are **identified** through IP **addresses** . The system also streamlines the deployment of software across multiple distributed servers. Resonate Global Dispatch...

DESCRIPTORS: Distributed Processing; E-Commerce; **Load Balancing** ; Localization; Network Administration; Network Management; Network Software; Performance Monitors; Remote Network Access; System Monitoring; System...

14/3,K/5
DIALOG(R)File 256:SoftBase:Reviews,Companies&Prods.
(c)2003 Info.Sources Inc. All rts. reserv.

00123186 DOCUMENT TYPE: Review

PRODUCT NAMES: Microsoft Exchange 2000 Server (772593)

TITLE: New Exchange Server 2000 will go beyond e-mail
AUTHOR: Cheek, Michael
SOURCE: Government Computer News, v19 n4 p35(1) Feb 21, 2000
ISSN: 0738-4300
HOMEPAGE: http://www.gcn.com

RECORD TYPE: Review

REVIEW TYPE: Product Analysis
GRADE: Product Analysis, No Rating

REVISION DATE: 20030330

...MDB files on different servers. Therefore, administrators can back up some databases more frequently and **distribute load** more equitably. Active Directory services can operate from another server, and particularized user profiles determine...
...recognize server events that can set of stipulated preventive actions. Spam can be prevented by **matching** an IP **address** against its Domain Name System entry. Exchange Server 2000 can create a server-side black...

14/3,K/6
DIALOG(R)File 256:SoftBase:Reviews,Companies&Prods.

00119611 DOCUMENT TYPE: Review

PRODUCT NAMES: Advantage Database Server (691879)

TITLE: Extended Systems Advantage Servers Up Simplicity
AUTHOR: Hoffman, Richard
SOURCE: Network Computing, v10 n19 p26(2) Sep 20, 1999
ISSN: 1046-4468
HOMEPAGE: http://www.NetworkComputing.com

RECORD TYPE: Review
REVIEW TYPE: Review
GRADE: B

REVISION DATE: 20000130

...and performance. The economically priced package omits enterprise level application server features, including failover or **load - balancing** , or row- or record-level locking. If Advantage's features meet users' needs, Advantage Database...
...dBASE, FoxPro, or CA-Clipper databases. Data Architect allows users to maintain index and data **parameters** , set **filters** , and configure many other table features and parameters. Standard DBF tables cannot have field names...

14/3,K/7
DIALOG(R)File 256:SoftBase:Reviews,Companies&Prods.

00115959 DOCUMENT TYPE: Review

PRODUCT NAMES: Internet Traffic Analysis (840521); Market Research (830290)

TITLE: IT Memo To Marketing: Go Out And Play In The Traffic
AUTHOR: Wilson, Tim
SOURCE: InternetWeek, v759 p29(1) Apr 5, 1999
ISSN: 0746-8121
HOMEPAGE: http://www.internetwk.com

RECORD TYPE: Review
REVIEW TYPE: Product Analysis
GRADE: Product Analysis, No Rating

REVISION DATE: 19990630

World Wide Web traffic analysis software, originally designed to help IT managers plan for **load balancing** , is now being used by marketing professionals to identify user patterns and preferences. In the...

...popular for these functions. Although they are still used by IT managers to plan for **load balancing** and capacity planning, increased sophistication and 'granularity' of the products is embraced by others in ...

...corporation. For example, traffic analysis packages now not only count Web site visits and IP **addresses** , but also **identify** how long users dwelled on a particular page, and whether or not they actually made...

DESCRIPTORS: Internet Marketing; Internet Traffic Analysis; Internet Utilities; **Load Balancing** ; Market Research; System Monitoring

14/3,K/8
DIALOG(R)File 256:SoftBase:Reviews,Companies&Prods.

00114489 DOCUMENT TYPE: Review

PRODUCT NAMES: Novera jBusiness (731731); Visibroker (632686); PowerTrip (747009); Secant Extreme Persistence **(747017); WebSphere Studio (730157**

TITLE: Application Servers in the Real World: How architecture benefits...
AUTHOR: Desmond, John P
SOURCE: Component Strategies, v1 n6 p10(4) Dec 1998
ISSN: 1055-3614
HOMEPAGE: http://www.sigs.com

RECORD TYPE: Review
REVIEW TYPE: Product Analysis
GRADE: Product Analysis, No Rating

REVISION DATE: 20030625

...**PRODUCT NAMES: 747009); Secant Extreme** Persistence **(**

...now Inprise's Visibroker, XTRA On-Line's (XOL's) PowerTrip, Secant Technologies' Secant Extreme **Persistence** , and IBM's WebSphere Studio are highlighted in a discussion of Arch's, XTRA On...

...The application server is generally defined as an application architecture of 'n' tiers, in which **multiple servers** are often assigned particular tasks, including access to databases and legacy systems. Multiple platforms can...

...network services through a browser. The application server can also take on middleware responsibilities, including **load balancing** , failover, and database caching. Architecture should be scalable, and Common Object Request Broker Architecture (CORBA...

14/3,K/9
DIALOG(R)File 256:SoftBase:Reviews,Companies&Prods.

00103670 DOCUMENT TYPE: Review

PRODUCT NAMES: AC200 (675369); AC300 (675377)

TITLE: Allot products tackle bandwidth shortages
AUTHOR: Fitzloff, Emily
SOURCE: InfoWorld, v19 n46 p87(1) Nov 17, 1997
ISSN: 0199-6649
HOMEPAGE: http://www.infoworld.com

RECORD TYPE: Review
REVIEW TYPE: Product Analysis

GRADE: Product Analysis, No Rating

REVISION DATE: 20030925

Allot Communications' AC200 and AC300 are integrated hardware/software solutions that emphasize policy-based **allocation** of **bandwidth** and server resources. A spokesman for the vendor says the products are meant to address...
...server load needs. Allot uses Virtual Channels based on such criteria as IP addresses, TCP **ports** , uniform resource **locators** (URLs), or content types to determine end-to-end-traffic parameters. Allot products improve on ...

```
Set     Items   Description
S1     633172   BALANC? OR DISTRIBUT? OR ALLOCAT? OR REALLOCAT? OR SHAR? OR
              REDISTRIBUT?
S2     608522   TABLE? OR MATRIX? OR MATRICES OR TUPLE OR GRID? OR SUBTABL?
S3     799195   THROUGHPUT? OR PACKET? OR FLOW? ? OR BANDWIDTH? OR LOAD?
S4    1299022   COMPAR? OR MATCH? OR LOCAT? OR IDENTIF? OR SORT? OR FILTER?
S5    1259095   ADDRESS? OR SOURCE? OR DESTINATION? OR ID OR COOKIE? OR PO-
              RT? OR PARAMETER? OR CHARACTERISTIC?
S6       4016   SERVER()FARM? OR (MULTIPL? OR PLURAL? OR SEVERAL? OR MANY -
              OR VARIOUS?)(N)(SERVER? OR ROUTER?)
S7      41809   PERSISTEN? OR STICKY OR STICKINESS
S8       6006   S1 (15N) S2 (15N) S3
S9       1336   S1 (15N) S7
S10        86   S8 (S) S9
S11       124   S1 (S) S2 (S) (S4 OR S5) (S) S6
S12       200   S10 OR S11
S13       138   S12 AND IC=G06F?
S14      2502   S1 (15N) S2 (15N) S3 (15N) S4
S15      1118   S14 (S) S5
S16        29   S15 (S) S7
S17        12   S13 AND IC=(G06F-007? OR G06F-015?)
S18        35   S1(10N)S2(10N)S3(10N)S7
S19        22   S18 AND IC=G06F?
S20        18   S8(5N)S9
S21        63   S16 OR S17 OR S18 OR S19 OR S20
S22        48   S21 AND IC=(G06F? OR H04L?)
S23        26   S22 NOT AD>20001121
File 348:EUROPEAN PATENTS 1978-2003/Nov W03
         (c) 2003 European Patent Office
File 349:PCT FULLTEXT 1979-2002/UB=20031120,UT=20031113
         (c) 2003 WIPO/Univentio
```

23/5,K/3 (Item 1 from file: 349)
DIALOG(R)File 349:PCT FULLTEXT

00802047 **Image available**
DISTRIBUTED TRAFFIC CONTROLLING SYSTEM AND METHOD FOR NETWORK DATA
SYSTEME DE COMMANDE DU TRAFIC DISTRIBUE ET PROCEDE POUR DONNEES DE RESEAU

Patent Applicant/Assignee:
RAINFINITY INC, Suite 200, 87 N. Raymond Avenue, Pasadena, CA 91103, US, US (Residence), US (Nationality), (For all designated states except: US)
Patent Applicant/Inventor:
BRUCK Jehoshua, 5657 Bramblewood Road, La Canada, CA 91011, US, US (Residence), US (Nationality), (Designated only for: US)
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Legal Representative:
HALL David A (et al) (agent), Heller Ehrman White & McAuliffe, LLP, Suite 700, 4250 Executive Square, La Jolla, CA 92037, US,
Patent and Priority Information (Country, Number, Date):
Patent: WO 200135601 A1 20010517 (WO 0135601)
Application: WO 2000US9966 20000412 (PCT/WO US0009966)
Priority Application: US 99437637 19991110
Parent Application/Grant:
Related by Continuation to: US 99437637 19991110 (CIP)
Designated States: AE AG AL AM AT AU AZ BA BB BG BR BY CA CH CN CR CU CZ DE DK DM DZ EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT TZ UA UG US UZ VN YU ZA ZW
(EP) AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE
(OA) BF BJ CF CG CI CM GA GN GW ML MR NE SN TD TG
(AP) GH GM KE LS MW SD SL SZ TZ UG ZW
(EA) AM AZ BY KG KZ MD RU TJ TM
Main International Patent Class: **H04L-029/06**
Publication Language: English
Filing Language: English
Fulltext Availability:
Detailed Description
Claims
Fulltext Word Count: 18369
English Abstract
A distributed gateway (310) represented in the figure for controlling computer network data traffic dynamically reconfigures traffic assignments among multiple gateway machines (302, 304, 306, 308) for increased network availability. If one of the distributed gateway machines becomes unavailable, traffic assignments are moved among the multiple machines such that network availability is substantially unchanged. The machines of the distributed gateway form a cluster (310) and communicate with each other using a Group Membership protocol word such that automatic, dynamic traffic assignment reconfiguration occurs in response to machines being added and deleted from the cluster, with no loss in functionality for the gateway overall, in a process that is transparent to network users, thereby providing a distributed gateway functionality that is scalable. Operation of the distributed gateway remains consistent as machines are added and deleted from the cluster. A scalable, distributed, highly available, load balancing network gateway is thereby provided, having multiple machines that function as a front server layer (310) between the network (314) and a back-end server layer (316,318) having multiple machines functioning as Web file servers, FTP servers, or other application servers. The front layer machines (302,304,306,308) comprise a server cluster that performs fail-over and dynamic load balancing for both server layers.

French Abstract

L'invention concerne une passerelle distribuee (310), representee par la figure, destinee a commander le trafic de donnees de reseau informatique et a reconfigurer de facon dynamique les affectations du trafic dans plusieurs dispositifs passerelles (302, 304, 306, 306) pour augmenter la disponibilite d'un reseau. Si l'un des dispositifs passerelle distribuee est indisponible, les affectations du trafic sont deplacees dans les dispositifs de facon que la disponibilite du reseau reste sensiblement inchangee. Les dispositifs de la passerelle distribuee forment un groupe (310) et communiquent les uns avec les autres par l'intermediaire d'un mot de protocole d'appartenance a un groupe de facon qu'une reconfiguration d'affectation du trafic dynamique et automatique se produise en reponse a l'ajout de dispositifs dans le groupe et au retrait de dispositifs de ce dernier, sans perte de fonctionnalite pour l'ensemble de la passerelle, dans un procede transparent pour les utilisateur du reseau, offrant ainsi une passerelle distribuee a fonctionnalite evolutive. Le fonctionnement de la passerelle distribuee reste coherent si des dispositifs sont ajoutes au groupe ou enleves de ce dernier. L'invention concerne ainsi une passerelle distribuee avec equilibrage des charges hautement disponible et evolutive comprenant plusieurs dispositifs fonctionnant comme une couche de serveur initiale (310) entre un reseau (314) et une couche de serveur finale (316, 318) comprenant plusieurs dispositifs fonctionnant comme des serveurs de fichiers Web, des serveurs de protocole de transfert de fichiers, ou comme d'autres serveurs. Les dispositifs de couche initiale (302, 304, 306, 308) comprennent un groupe de serveurs qui met en oeuvre un equilibrage de charge dynamique et de reprise pour les deux couches du serveur.

Legal Status (Type, Date, Text)
Publication 20010517 A1 With international search report.
Examination 20010614 Request for preliminary examination prior to end of 19th month from priority date
Withdrawal 20011025 Withdrawal of international application after international publication

Main International Patent Class: **H04L-029/06**
Fulltext Availability:
Detailed Description

Detailed Description

... the associated VIP address is "sticky" to the Preferred Host. When a VIP address is " **sticky** " to an assigned node (the one it is associated with in the same row of **Table** 1), it is no longer handled by the **load balancing** process of the **distributed** gateway application wrapper.

ThePersistenceFlagfieldcantakethreepossibleintegervalues:"O","I"and"3". Whenit is "O", it means that the associated VIP address is not **sticky** to any node. This VIP address can be moved, if so required by the **load balancing** process. When the **Persistence** Flag is "I", it means this VIP address is **sticky** to the Current Host specified in the same row of **Table** 1, and therefore it is not handled by the **load balancing** process. If the Current Host fails, this VIP address assignment will move to another node of the subnet, and will become **sticky** to that node. It will stay on that node even if the original Host recovers...

23/5,K/19 (Item 17 from file: 349)
DIALOG(R)File 349:PCT FULLTEXT

00749596 **Image available**

DISTRIBUTED SERVER CLUSTER FOR CONTROLLING NETWORK TRAFFIC
GROUPE DE SERVEURS DISTRIBUES POUR LE CONTROLE DU TRAFIC DE RESEAU

Patent Applicant/Assignee:
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Patent Applicant/Inventor:
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BOHOSSIAN Vasken, 1127 E. Del Mar Boulevard #227, Pasadena, CA 91106, US, US (Residence), CA (Nationality), (Designated only for: US)
FAN Chenggong, 1155 E. Del Mar Boulevard #105, Pasadena, CA 91106, US, US (Residence), CN (Nationality), (Designated only for: US)
LEMAHIEU Paul, 1032 E. Del Mar Boulevard #301, Pasadena, CA 91106, US, US (Residence), US (Nationality), (Designated only for: US)
LOVE Philip, 1032 E. Del Mar Boulevard #301, Pasadena, CA 91106, US, US (Residence), GB (Nationality), (Designated only for: US)
Legal Representative:
HALL David A (et al) (agent), Heller Ehrman White & McAuliffe LLP, Suite 700, 4250 Executive Square, La Jolla, CA 92037, US,

Patent and Priority Information (Country, Number, Date):
Patent: WO 200062502 A2-A3 20001019 (WO 0062502)
Application: WO 2000US9861 20000412 (PCT/WO US0009861)
Priority Application: US 99128872 19990412; US 99437637 19991110
Parent Application/Grant:
Related by Continuation to: US 99437637 19991110 (CIP); US 99128872 19990412 (CIP)
Designated States: AE AG AL AM AT AU AZ BA BB BG BR BY CA CH CN CR CU CZ DE DK DM DZ EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT TZ UA UG US UZ VN YU ZA ZW
(EP) AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE
(OA) BF BJ CF CG CI CM GA GN GW ML MR NE SN TD TG
(AP) GH GM KE LS MW SD SL SZ TZ UG ZW
(EA) AM AZ BY KG KZ MD RU TJ TM
Main International Patent Class: **H04L-029/06**
Publication Language: English
Filing Language: English
Fulltext Availability:
Detailed Description
Claims
Fulltext Word Count: 23312

English Abstract
A scalable, distributed, highly available, load balancing server system having multiple machines is provided that functions as a front server layer between a network (such as the Internet) and a back-end server layer having multiple machines functioning as Web file servers, FTP servers, or other application servers. The front layer machines comprise a server cluster that performs fail-over and dynamic load balancing for both server layers. The operation of the servers on both layers is monitored, and when a server failure at either layer is detected, the system automatically shifts network traffic from the failed machine to one or more operational machines, reconfiguring front-layer servers as needed without interrupting operation of the server system. The server system automatically accommodates additional machines in the server cluster, without service interruption. The system operates with a dynamic reconfiguration protocol that permits reassignment of network addresses to the front layer machines. The front layer machines perform their operations without breaking network communications between clients and servers, and without rebooting of computers.

French Abstract

La presente invention concerne un systeme de serveurs distribues capable d'etre mis a l'echelle a grande disponibilite et a chargement equilibre, comportant une pluralite de machines, qui fonctionne en tant que couche de serveur initial entre un reseau (tel l'Internet) et une couche de serveur final comportant une pluralite de machines operant en tant que serveurs de fichier Web, serveurs de protocole de transfert de fichiers ou serveurs d'autres applications. Les machines de couche initiale comportent un groupe de serveurs qui effectue un chargement dynamique et de reprise pour les deux couches de serveur. Le fonctionnement des serveurs sur les deux couches est surveille, et lorsqu'une panne de serveur est detectee dans une des deux couches, le systeme fait automatiquement passer le trafic de reseau de la machine defectueuse vers une ou plusieurs machines en fonctionnement, effectuant une configuration nouvelle des serveurs de la couche initiale sans interrompre le fonctionnement du systeme de serveurs. Le systeme serveur adapte automatiquement les machines additionnelles dans le groupe de serveurs sans interruption du service. Le systeme fonctionne avec un protocole de reconfiguration qui permet la reaffectation des adresses de reseaux aux machines de la couche initiale. Les machines de la couche initiale effectuent leurs operations sans interrompre les communications sur reseau entre clients et serveurs, et sans reinitialisation des ordinateurs.

Legal Status (Type, Date, Text)

Publication	20001019	A2 Without international search report and to be republished upon receipt of that report.
Examination	20010104	Request for preliminary examination prior to end of 19th month from priority date
Search Rpt	20010329	Late publication of international search report
Republication	20010329	A3 With international search report.
Withdrawal	20011018	Withdrawal of international application after international publication

Main International Patent Class: **H04L-029/06**

Fulltext Availability:

Detailed Description

Detailed Description

... the associated VIP address is "sticky" to the Preferred Host. When a VIP address is " **sticky** " to an assigned node (the one it is associated with in the same row of **Table** 1), it is no longer handled by the **load balancing** process of the **distributed** server cluster application wrapper. The **Persistence** Flag field can take three possible integer values: "O", "I" and "Y'.

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When it is "O", it means that the associated VIP address is not **sticky** to any node. This VIP address can be moved, if so required by the **load balancing** process. When the **Persistence** Flag is " 1 ", it means this VIP address is **sticky** to the Current Host specified in the same row of **Table** 1, and therefore it is not handled by the **load balancing** process. If the Current Host fails, this VIP address assignment will move to another node of the subnet, and will become **sticky** to that node. It will stay on that node even if the original Host recovers...

```
Set     Items   Description
S1   17181961   BALANC? OR DISTRIBUT? OR ALLOCAT? OR REALLOCAT? OR SHAR? OR
              REDISTRIBUT?
S2    3379239   TABLE? OR MATRIX? OR MATRICES OR TUPLE OR GRID? OR SUBTABL?
S3     165068   S1(2N)(THROUGHPUT? OR PACKET? OR FLOW? ? OR BANDWIDTH? OR -
              LOAD?)
S4      89029   S2(2N)(COMPAR? OR MATCH? OR LOCAT? OR IDENTIF? OR SORT? OR
              FILTER?)
S5     335911   (COMPAR? OR MATCH? OR LOCAT? OR IDENTIF? OR SORT? OR FILTE-
              R?)(3N)(ADDRESS? OR SOURCE? OR DESTINATION? OR ID OR COOKIE? -
              OR PORT? OR PARAMETER? OR CHARACTERISTIC?)
S6      61385   SERVER()FARM? OR (MULTIPL? OR PLURAL? OR GROUP OR SEVERAL?
              OR MANY OR VARIOUS?)(N)(SERVER? OR ROUTER?)
S7     373117   PERSISTEN? OR STICKY OR STICKINESS
S8          5   S3(S)S4(S)S5
S9         78   S3(S)S4
S10        55   S3(S)S5(S)(S6 OR S7)
S11         2   S9(S)(S6 OR S7)
S12        62   S8 OR S10 OR S11
S13        38   RD (unique items)
S14        24   S13 NOT PY>2000
S15        22   S14 NOT PD>20001121
File 275:Gale Group Computer DB(TM) 1983-2003/Nov 21
         (c) 2003 The Gale Group
File  47:Gale Group Magazine DB(TM) 1959-2003/Nov 21
         (c) 2003 The Gale group
File 636:Gale Group Newsletter DB(TM) 1987-2003/Nov 21
         (c) 2003 The Gale Group
File  16:Gale Group PROMT(R) 1990-2003/Nov 21
         (c) 2003 The Gale Group
File 624:McGraw-Hill Publications 1985-2003/Nov 21
         (c) 2003 McGraw-Hill Co. Inc
File 484:Periodical Abs Plustext 1986-2003/Nov W3
         (c) 2003 ProQuest
File 613:PR Newswire 1999-2003/Nov 24
         (c) 2003 PR Newswire Association Inc
File 813:PR Newswire 1987-1999/Apr 30
         (c) 1999 PR Newswire Association Inc
File 141:Readers Guide 1983-2003/Oct
         (c) 2003 The HW Wilson Co
File 696:DIALOG Telecom. Newsletters 1995-2003/Nov 21
         (c) 2003 The Dialog Corp.
File 621:Gale Group New Prod.Annou.(R) 1985-2003/Nov 24
         (c) 2003 The Gale Group
File 674:Computer News Fulltext 1989-2003/Nov W2
         (c) 2003 IDG Communications
File  88:Gale Group Business A.R.T.S. 1976-2003/Nov 20
         (c) 2003 The Gale Group
File 369:New Scientist 1994-2003/Nov W3
         (c) 2003 Reed Business Information Ltd.
File 160:Gale Group PROMT(R) 1972-1989
         (c) 1999 The Gale Group
File 635:Business Dateline(R) 1985-2003/Nov 20
         (c) 2003 ProQuest Info&Learning
File  15:ABI/Inform(R) 1971-2003/Nov 22
         (c) 2003 ProQuest Info&Learning
File   9:Business & Industry(R) Jul/1994-2003/Nov 21
         (c) 2003 Resp. DB Svcs.
File  13:BAMP 2003/Nov W3
         (c) 2003 Resp. DB Svcs.
File 810:Business Wire 1986-1999/Feb 28
         (c) 1999 Business Wire
File 610:Business Wire 1999-2003/Nov 24
         (c) 2003 Business Wire.
File 647:CMP  Computer Fulltext 1988-2003/Nov W3
         (c) 2003 CMP Media, LLC
File  98:General Sci Abs/Full-Text 1984-2003/Oct
         (c) 2003 The HW Wilson Co.
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File 148:Gale Group Trade & Industry DB 1976-2003/Nov 24
(c)2003 The Gale Group
File 634:San Jose Mercury Jun 1985-2003/Nov 22
(c) 2003 San Jose Mercury News

15/3,K/1 (Item 1 from file: 275)
DIALOG(R)File 275:Gale Group Computer DB(TM)

02421024 SUPPLIER NUMBER: 63802302 (USE FORMAT 7 OR 9 FOR FULL TEXT)
Load-balancing technology helps performance-marketing company Be Free rapidly scale its infrastructure without breaking the bank. -- Loading Up: High-Speed Transaction Processing on the Internet.(Company Business and Marketing)
Golick, Jerry
Network Magazine, 66
August 1, 2000
ISSN: 1093-8001 LANGUAGE: English RECORD TYPE: Fulltext; Abstract
WORD COUNT: 3160 LINE COUNT: 00258

... and what network protocols you need to run.

One of the advantages of using a **load - balancing** server is that you can manage growth in incremental chunks. Rather than buy a big mainframe and try to grow into it, you can install a **load - balanced server farm** that permits you to easily add capacity as demand grows. Best of all, this approach...

...an arm and a leg. Further, this scalability is seamless to end users because the **load - balancing** server is always the primary interface point. In other words, regardless of where the servers are **located** , a single Web **address** is all that end users require.

However, Coyote Point's Equalizer and competitors' products alike...

15/3,K/3 (Item 3 from file: 275)
DIALOG(R)File 275:Gale Group Computer DB(TM)

02388556 SUPPLIER NUMBER: 61241564 (USE FORMAT 7 OR 9 FOR FULL TEXT)
E-com sites carry heavy load.(Internet/Web/Online Service Information)
Musich, Paula
PC Week, 1
April 3, 2000
ISSN: 0740-1604 LANGUAGE: English RECORD TYPE: Fulltext
WORD COUNT: 719 LINE COUNT: 00061

... servers to speed customer connections by splitting individual users' sessions into multiple IP addresses.

Most **load balancing** software vendors keep an individual session together via a method called **persistence** . By assigning a unique **cookie identifier** to the session, the software can maintain the **persistent** connection required to ensure that electronic shopping carts stay with customers as they browse an...

15/3,K/4 (Item 4 fro[redacted]ile: 275)
DIALOG(R)File 275:Gale Group Computer DB(TM)

02265484 SUPPLIER NUMBER: 53680336 (USE FORMAT 7 OR 9 FOR FULL TEXT)
New Enterprise Switch: Cisco Systems Rolls Out a New Class of Multi-Gigabit Application-Aware Enterprise Switches. (Catalyst 6000) (Product Announcement)
EDGE, on & about AT&T, NA
Feb 1, 1999
DOCUMENT TYPE: Product Announcement LANGUAGE: English
RECORD TYPE: Fulltext
WORD COUNT: 1275 LINE COUNT: 00113

TEXT:
...insure high system availability at the device level, the Catalyst 6000 family supports redundant supervisors, **load - sharing** power supplies, fans, system clocks, uplinks and switch fabrics (in Catalyst 6500 series). All system...

...the Catalyst 6000 family supports automatic recovery from failure using Spanning Tree per VLAN, and **load - sharing** for faster link convergence using Cisco's Fast EtherChannel (FEC) or Gigabit EtherChannel (GEC) technologies...
...line cards for increased redundancy and higher-bandwidth links. The Catalyst 6000 family can also **load balance** across redundant Layer-3 paths and supports Hot Standby Routing Protocol (HSRP), providing fast cutover...

...Customers are continually trying to reduce overall cost of ownership by centralizing data centers and **server farms** off-site and then connecting them back into the campus via gigabit Ethernet. Now, with...tracking can be used for troubleshooting and security purposes. Security is further supported with secure **port filtering** which enables individual **ports** to be accessed from specified workstations. The Catalyst 6000 family also supports TACACS+, RADIUS, Access..

15/3,K/9 (Item 3 from file: 16)
DIALOG(R)File 16:Gale Group PROMT(R)

06624047 Supplier Number: 55708467 (USE FORMAT 7 FOR FULLTEXT)
HydraCookie Allows Routable Prioritization of WEB Requests.
Business Wire, p1018
Sept 10, 1999
Language: English Record Type: Fulltext
Document Type: Newswire; Trade
Word Count: 335

... service levels on the Internet, Intranet and Extranet.

HydraCookie supports cookie-based routing in local **server farms**, as well as via the Internet. Local HydraWEB(TM) **load balancers** **identify** the **cookies** in incoming requests, analyze them, and forward the request to predefined servers. If there are **multiple servers** for the request, HydraWEB **load balances** between them.

For installations with geographically dispersed sites, HydraCookie can be used to rout to...

15/3,K/12 (Item 1 fr[redacted]file: 813)
DIALOG(R)File 813:PR Newswire

1216549 SFM033
Alteon Networks Unveils New Line of Internet Traffic Directors Delivering Ten Times the Processing Power at One Third the Cost

DATE: January 26, 1998 08:03 EST WORD COUNT: 1,140

... and processing capacity, as well as pre-defined maximum load threshold on individual servers.

Server **Load Balancing** on the ACEdirector requires no client administration and no change to servers. Users configure a virtual IP address (VIP) on the ACEdirector for each **load - sharing server group** . Application sessions are **identified** by **source** and **destination** IP and TCP **port addresses** . Once **identified** , the ACEdirector "binds" a new session to the most available server associated with the destination...

... the session terminates. The ACEdirector also offers special handling to meet the requirements of UDP, **persistent** HTTP, SSL (Secure Socket Layer), FTP and passive FTP sessions.

Unlike Layer-4-aware packet...

15/3,K/14 (Item 2 fr file: 696)
DIALOG(R)File 696:DIALOG Telecom. Newsletters

00600013
Industry Briefs
ELECTRONIC MESSAGING NEWS
April 15, 1998 VOL: 10 ISSUE: 8 DOCUMENT TYPE: NEWSLETTER
PUBLISHER: PHILLIPS BUSINESS INFORMATION
LANGUAGE: ENGLISH WORD COUNT: 620 RECORD TYPE: FULLTEXT

TEXT:
...this July will ship
software that links distributed servers together to form a centrally managed **server farm** . Designed for intranets, the software - called SiteMARC - will allow information technology managers to monitor remote...

...resources; IntelliDirector, an application that will enforce policies and acts in conjunction with IntelliAgents to **distribute** the **load** evenly across the network; and IntelliAdminstrator, which will allow administrators to define the level of...and remote and mobile users of corporate networks. Under Internet protocols, a user is generally **identified** by IP **address** , not user name. Check Point is expanding to compete in a market that is demanding...

15/3,K/16 (Item 2 fr[redacted]file: 674)
DIALOG(R)File 674:Computer News Fulltext

081648
'Cookie cutting' keeps traffic moving
Byline: TED SCHROEDER
Journal: Network World Page Number: 49
Publication Date: February 21, 2000
Word Count: 588 Line Count: 55

Text:
... used in search engines, shopping carts, Web-based e-mail and secure e-commerce applications, **cookies** help administrators **identify** and classify traffic by individual user.Many important Web applications require **persistence** . **Persistence** refers to transactions from a client that must be processed by the same server to...

... be assigned a different IP address for each TCP connection.This poses problems for traditional **load balancers** in maintaining session **persistence** . Because traditional **load balancers** typically use the source IP address to bind user sessions to a specific server for...

15/3,K/17 (Item 3 from file: 674)
DIALOG(R)File 674:Computer News Fulltext

080670
Foundry extends server load-balancing reach
Byline: JEFF CARUSO
Journal: Network World Page Number: 21
Publication Date: January 17, 2000
Word Count: 451 Line Count: 42

Text:
Foundry Networks this week will give e-commerce customers more options for server **load - balancing** , as the company updates its switch software to match competitors' capabilities.Foundry's Internet IronWare...

... as Cisco and Alteon WebSystems have had for some time.The new version also maintains **persistent** sessions, ensuring that all packets for a particular session go to the same server. The...

... NW, Nov. 15, 1999, p.14). It can also use the Secure Sockets Layer session **ID** to **identify** packets.Intira Corp. is looking at global server **load balancing** to **distribute loads** among data centers in St. Louis, New York and Pleasanton, Calif., says Dan Rabb, lead...
... helps the company meet its service-level agreements.Although other vendors provide for global server **load balancing** , Foundry does it slightly differently, says Chandra Kopparapu, product marketing manager at Foundry. Others take...

... the same server. If the user is ordering multiple items from the Web site, such **persistence** is necessary to make sure the server manages the transaction from start to finish.Version...

15/3,K/18 (Item 4 fr[redacted] file: 674)
DIALOG(R)File 674:Computer News Fulltext

075297
Performance soars, features vary
Byline: PAUL ANDERSON AND GAIL JAMES
Journal: Network World Page Number: 50
Publication Date: June 14, 1999
Word Count: 1908 Line Count: 181

Text:
... it with high-end hardware and hope the server is fast enough to handle the **load** ; **distribute** your content to several smaller sites, each with its own Web server; or **balance** the traffic **load** across multiple mirrored servers. For most organizations, **load balancing** is the clear choice. All nine products we tested improved Web server performance significantly, making...

... appreciated ACEdirector's Layer 3 switching and NAT capabilities, but Alteon needs to add global **load balancing** to the mix.Strong security distinguishes F5 Networks' Big/ip High Availability+ Single Controller 2...

... servers and provides no trending data.If you're looking for a basic Web server **load balancer** that won't require much training, Coyote Point's Equalizer E250 may be just what...

... needs refining. Documentation errors hurt its score in this review. One of the three fastest **load balancers** we tested, IBM's WebSphere Performance Pack, is scalable and secure, and sports a polished...

... a lot of useful features, but it lacks the polish of the leaders.Though the **load - balancing** products we tested are as diverse as the vendors that designed them, we found they fall into three basic product types:n **Load - balancing** software, which includes Resonate's Central Dispatch for Sun and Windows NT, and IBM's...

... Point's Equalizer, HydraWeb's Hydra5000 and IPivot's Intelligent Broker 4000. n Switch-based **load balancers** , which include Alteon's ACEdirector 2 and HolonTech's HyperFlow 2. No one product type...

... top three finishers. Share the burdenPerformance is a key feature to look for in a **load balancer** . Our performance tests were not designed to stress the products to their breaking points. Rather, we set out to compare the efficiency of the nine **load balancers** and show the improvements you can expect to see when you add a **load balancer** to your site.In our tests, the nine **load balancers** significantly improved Web site performance. Surprisingly, F5's Big/ip improved pages-served performance by ...

... the performance leader, providing a 200% throughput increase over a single Web server with-out **load balancing** . With three Web servers, Resonate's Central Dispatch led the field, providing a 330% throughput...

... Web page delivery 185% to 57 page/sec. The average speed gain for all the **load balancers** tested was a 236% increase.For scalability, we evaluated each product's ability to handle a large **server farm** directly connected to the **load balancer** , as well as the product's ability to dynamically test a remote Web site and...

... it if that site would be the best performer for that user.The software-based **load balancers** accept connection requests and hand the connections over to the Web server chosen in the balancing scheme. This way, the **load balancer** only handles the packet once.Thus, for the same processing power, a software **load balancer** should be able to handle roughly twice the Web service requests of a switch- or...

... device. Resonate's Central Dispatch loads an agent onto the Web server

to complete the **load balancer** connection. IBM's WebSphere requires a loopback adapter on the Web server. You can configure...

... beyond its capacity as a router, you can configure Web Server Director like a software **load balancer** . Similarly, you can configure IPivot's Intelligent Broker 4000 like a router, using its single...

... overcomes this limitation with its four-port Hydra5000 router. HydraWeb also offers an optional global **load - balancing** management tool called HydraHydra100. The tool provides true enterprise scalability, site-level resiliency, traffic prioritization and disaster recovery.Locally, the switch-based **load balancers** scale well. The switches either put Web servers on their own switched ports or cluster...

...with multiple connections to the WAN interfaces. HolonTech's HyperFlow 2 is a 16-port **load - balancing** switch. The other switch we tested, Alteon's ACEdirector 2, has eight ports for servers...

...add another switch if you need more connections. However, neither switch supports remote Web site **load balancing** , while the seven other products we tested do.Management and configurationWeb performance can change by...

...and CPU utilization.Radware's Web Server Director's GUI supports NAT and several other **load - balancing** options. We liked the way Web Server Director allowed us to test response time for...

... drawbacks of ACEdirector is that it doesn't provide server performance history.The router-based **load balancers** are the hardest to configure for someone with limited Unix experience. F5's Big/ip...

... based management utility that is fast but plain, giving all the necessary configuration options for **load balancing** . Equalizer offers innovative data tracking and plotting of historical statistics, which gives you a good...

... tasks for a large Web site. HydraWeb's Hydra5000 also requires you to configure its **load balancer** from a Unix command line. Fortunately, HydraWeb's standard policy includes on-site installation with...

... these devices is making sure they are secure against outside tampering. The dedicated router-based **load balancers** , which typically run on Unix platforms, offer the best security because they can be set up with access lists, **port filtering** and other security features. For instance, you can easily configure the devices to allow only...
... Web servers on a private network and using NAT forces users to go through the **load balancer** before attaching to the Web servers. Of course, this can only be done when the **load balancer** is acting as a router. Only IBM's WebSphere and Resonate's Central Dispatch do...